Application. No.: 10/597,574

Reply to Office Action of January 13, 2010

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

- (Canceled).
- (Canceled).
- (Currently Amended) A method of transcoding dissimilar payloads-carried in a first transport stream. the method comprising:

demultiplexing, at a device, the a first transport stream to recover first and second payloads that were each carried in the first transport stream prior to demultiplexing;

determining whether a protocol associated with the second payload is dissimilar from a protocol associated with the first payload;

transcoding the second payload to the protocol associated with the first payload if the protocol associated with the second payload is determined to be dissimilar from the protocol associated with the first payload; and

multiplexing the first payload and the transcoded second payload to a second transport stream.

- 4. (Currently Amended) The method of claim 3 further—comprising associating wherein the protocol associated with the first payload is older than the protocol associated with WHEG-2 protocols and associating the second payload-with AVC protocols, and such that the second payload is transcoded to the older MPEG-2-protocols.
- (Currently Amended) The method of claim 4-3 wherein further comprising associating-the protocol associated with the first payload is less compressive than the protocol

Reply to Office Action of January 13, 2010

associated with the second payload, and the second payload is transcoded to the less compressive AVC protocols with MPEG 4 protocols.

6. (Cancelled)

- 7. (Original) The method of claim 3 further comprising decrypting conditional access (CA) encryption of the first transport stream prior to demultiplexing.
- (Original) The method claim 7 further comprising decrypting the CA encryption of the first transport stream in a settop box (STB).
- 9. (Currently Amended) The method of claim *3 further wherein the comprising steps of demultiplexing the first transport stream, transcoding the second payload, and multiplexing the first and transcoded second payloads occur in a card inserted into a card slot of thea STB first interface device.
- (Original) The method of claim 9 further comprising decoding copy protection of the first transport stream in the card and prior to the demultiplexing, transcoding, and multiplexing.
- (Original) The method of claim 10 further comprising encoding copy protection to the second transport stream.
- (Currently Amended) The method of claim 11 further comprising transmitting the copy protection encoded second transport stream from the card to the <u>STBfirst interface</u> <u>device</u>.

Application. No.: 10/597,574 Reply to Office Action of January 13, 2010

- (Cancelled)
- 14. (Cancelled)
- 15. (Cancelled)
- 16-28. (Canceled).

29. (Currently Amended) A method, comprising:

demultiplexing, at a device, a first transport stream to recover a plurality of first payloads and a plurality of second payloads thereinthat were each carried in the first transport stream prior to demultiplexing, each of the first payloads being formatted according to a first protocol, and each of the second payloads being formatted according to a second protocol;

 $transcoding \ each \ of \ the \ second \ payloads \ so - us - to \ be \ formatted \ according \ to \ a$ protocol that depends upon the first protocol; and

multiplexing the first payloads with the transcoded second payloads into a second transport stream.

30. (Currently Amended) The method of claim 29, further comprising:

prior to demultiplexing, dencoding the first transport stream $\frac{1}{2}$ so $\frac{1}{2}$ to $\frac{1}{2}$ to $\frac{1}{2}$ to $\frac{1}{2}$ representation; and

after <u>multiplexing</u>, <u>encoding</u> and <u>prior to demultiplexing</u>, <u>dencoding</u> the <u>first</u> <u>second</u> transport stream so as-to no longer-be copy protected.

31. (Currently Amended) The method of claim 30, further comprising:

Application. No.: 10/597,574 Reply to Office Action of January 13, 2010

<u>prior to demultiplexing and prior to decoding, after multiplexing, encoding the second-first transport stream so as to be copy protected:</u>

after multiplexing and after encoding the second transport stream, decoding the second transport stream so as-to no longer be copy protected; and

after decoding the second transport stream, demultiplexing the second transport stream to recover the first and payloads from the transcoded second payloads.

32. (Currently Amended) An apparatus, comprising:

a first demultiplexor configured to demultiplex a first transport stream to recover a plurality of first payloads and a plurality of second payloads that were each carried in the first transport stream prior to demultiplexingtherein, each of the first payloads being formatted according to a first protocol, and each of the second payloads being formatted according to a second protocol:

a transcoder configured to transcode each of the second payloads in a manner that depends upon the first protocol; and

a multiplexor configured to multiplex the first payloads with the transcoded second payloads into a second transport stream.

33. (Currently Amended) The apparatus of claim 32, further comprising:

a first copy protection dencoder configured to dencode the first transport stream so as to remove be copy protected protection; and

a first copy protection dencoder configured to dencode the first-second transport stream received from the <u>multiplexorfirst copy protection encoder</u>, so as to no longer be copy protected, and to send the decoded first transport stream to the first demultiplexor.

34. (Currently Amended) The apparatus of claim 33, further comprising:

Application. No.: 10/597,574 Reply to Office Action of January 13, 2010

a second copy protection encoder configured to encode the seeond-first transport stream to be copy protected and transmit it to the first copy protection decoder, received from the multiplexor, so as to be copy protected;

- a second copy protection decoder configured to decode the second transport stream received from the second first copy protection encoder, so as to no longer be copy protected; and
- a second demultiplexor configured to demultiplex the second transport stream received from the second copy protection decoder, to separate the first payloads from the second payloads.
- 35. (New) The apparatus of claim 32, wherein the demultiplexor, the transcoder, and the multiplexor are on a first hardware module that is configured to be inserted into a receiver device that is configured to decode payloads formatted according to the second protocol.
- 36. (New) The apparatus of claim 33, wherein the demultiplexor, the transcoder, the multiplexor, the first copy protection encoder, and the first copy protection decoder are on a first hardware module that is configured to be inserted into a second hardware module that is configured to decode payloads formatted according to the second protocol.
- 37. (New) The apparatus of claim 34, wherein the demultiplexor, the transcoder, the multiplexor, the first copy protection encoder, and the first copy protection decoder are on a first hardware module that is configured to communicate with a second hardware module that contains the second copy protection encoder, the second copy protection decoder, and the second demultiplexor.
- (New) The method of claim 29, further comprising transmitting the second transport stream to a device that is configured to receive transport streams containing payloads formatted according to the first protocol.